



2004



# Progress Report of Activities

## Cape May New Jersey Plant Materials Center

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Web site: <http://plant-materials.nrcs.usda.gov/njpmc/>

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### Mission and Objectives

The mission of the Plant Materials Program is to provide timely and effective vegetative solutions for identified resource needs. Superior accessions of adapted plants are developed, tested and released to commercial growers. Technical assistance is then provided in regards to production and management methodologies. Plant materials and state-of-the-art plant science technology are promoted to assist in conservation of natural resources and meeting the objectives of environmental programs. The use of native plant materials is encouraged.

The Cape May Plant Materials Center (PMC) has been challenged to address the following natural resource concerns:

- Develop local eco-types of native plants for Farm Bill Conservation Programs.
- Recreational Lands: Diversify Native Plant availability for Coastal Sand Dune Systems.
- Marshland/Tidal Marsh Estuaries: Develop additional native species for tidal soil bio-engineering and stabilization.
- Stabilization of Highly Disturbed Areas: develop "How To" revegetation technologies.

The PMC is located 5 miles due east of the Avalon New Jersey beaches and adjacent to New Jersey's most expansive tidal marsh estuaries.



**PMC Aerial Photo.**

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## **Cape May PMC Staff Receives National Coastal America Recognition.**

To most NRCS employees, the term Coastal America represents little meaning when compared to CRP, CREP, EQIP and WHIP. Among sister federal agencies and coastal advocacy groups, a Coastal America National Award is a highly sought after recognition.

A couple years ago a multi-agency task force with many entities including the U.S. Army Corp of Engineers, the U.S. Fish and Wildlife Service and the State of North Carolina sought to restore a maritime forest coastline and marsh habitat. The initial efforts experienced less than 10% survival.

Because the Cape May PMC has long been recognized as a leader in marsh estuary plant science technologies we were invited into the partnership. After months of planning and a lot of work, the planting experienced a 100% survival. The success of this activity resulted in all agency team members receiving the Coastal America's 2004 National Partnership award. This award is so well respected that PMC staff received a congratulatory letter from the White House signed by President George W. Bush.



Photo of the Roanoke Island Festival Park Inter-Agency Team with National Leadership.

To learn more about Coastal America visit their website at: <http://www.coastalamerica.gov>

## Cape May PMC: National Agro-Forestry Technology Repository.

In April 2004, P.A.S. Lynn Betts, and National Agro Forestry Center Specialists Gary Wells and Bruce Wight toured the Cape May PMC. The meeting was intended to discuss the encroachment of urban housing on PMC operations and redesigning the PMC farm layout. It was decided that this was an excellent opportunity to transform a portion of the PMC into a demonstration of Agro-Forestry technologies for the mid-Atlantic. PMC staff spent many weeks plowing up half the farm and coordinating with the National Center.

The new Plan has been developed and will be unveiled at the PMC's 40<sup>th</sup> Anniversary Celebration in 2005.



## Planned Native Plant Releases for the Cape May PMC.

Scientific	Release Name	Year	Release
Panicum virgatum	Carthage	2005	Cultivar
Panicum virgatum	High tide	2005	Germplasm
Schizachyrium littorale	Salty dog	2006	Selected
Uniola paniculata	Pioneer	2007	Selected
Spartina cynosuroides	Chessie	2007	Selected
Panicum virgatum	Timber (NC)	2008	Tested
Andropogon gerardii	Pending N.E.	2008	Source-identified
Spartina alterniflora	Harvestmaster	2009	Tested
Spartina patens	Drydock	2009	Tested
Tridens flavus	Flavorite	2009	Selected
Schizachyrium scoparium	Pending N.E.	2010	Selected
Sorghastrum nutans	Pending N.E.	2010	Selected

## Acadia National Park Service:

The Cape May PMC entered into a formal Agreement with the National Park Service Acadia unit to provide technical assistance in developing native plant propagation protocols that will lead to the re-vegetation of Blackwoods Campground of the Acadia National Park Service unit. This agreement is administered under a National MOU between the NRCS and NPS. Many if not most PMC's across the nation are involved in such agreements with park units residing in their PMC service area. These agreements collectively develop new protocols for native plant propagation and establishment techniques in virtually every eco-region of the U.S.



## **New Advancements in Estuary Sciences:**

The Cape May PMC through estuary field evaluation plantings in North Carolina will be publishing its work in 2005 that makes unique contributions to the Body of Knowledge relating to estuary plant propagation and establishment technologies. Observed shifts in plant community composition due to sea level rise and land subsidence will also be discussed.

## **PMC and Master Gardner Conferences Continue**

The Cape May PMC proudly hosted several Master Gardner training courses in conjunction with the local county extension office. These sessions included Plant Propagation I and II, a Native Plants Lab and a Twilight Meeting and Educational Tour with the Cape May County Board of Agriculture.

By hosting these sessions, a new audience of plant enthusiasts became aware of the PMC and donated hundreds of hours of volunteer plant materials work.



Master Gardner Conferences Continue to Grow.

## **Expansion of Seed Increase Fields for Several New Releases.**

The PMC staff again spent many hours traveling to collect materials for:

- New England releases of little blue, big blue and Indian grass.
- A composite selected class release of giant cordgrass.
- A composite selected class release of coastal little bluestem.

See page three (3) for a schedule of release dates.

## **Interagency Joint Cooperative Studies with ARS and NRCS Continue.**

The Cape May PMC staff in cooperation with the National Plant Materials Center, Big Flats PMC and ARS staff implemented four (4) field plantings in three states. The results from the previous Aerenchyma tissue investigations conducted in the Cape May PMC greenhouses were applied to “real world” scenarios with selected sites at:

- University of Maryland Wye Education and Research Center, Eastern Shore of MD
- ARS Klingerstown Watershed Study Site Klingerstown, PA.
- Big Flats PMC NY
- Lambs Creek Mansfield, PA

The results of this study will develop new specifications for NRCS FOTG

## **Links to Mission Related Resources .**

Main USDA NRCS National Plant Materials Homepage  
National Plant Database

PMC Release Suppliers [ftp://ftpfc.sc.egov.usda.gov/NJ/programs/pmc/CapeMayPMC\\_Plant\\_Release\\_Suppliers.pdf](ftp://ftpfc.sc.egov.usda.gov/NJ/programs/pmc/CapeMayPMC_Plant_Release_Suppliers.pdf)  
Estuaries: <http://www.estuaries.org/>

National Park Service Activities:  
Master Gardner Program  
Aerenchyma Tissue Information

<http://plant-materials.nrcs.usda.gov/>  
<http://plants.usda.gov/index.html>

<http://www.estuaries.org/>  
<http://www.estuaries.org/estuarybasics.php>  
<http://www.nps.gov>

<http://www.rce.rutgers.edu/mastergardeners/>  
Information available upon request.